

**WHAT IS CLAIMED IS:**

1. A method for superimposing graphic representations of ground locations onto images of ground locations after detecting the presence of material failure(s) or failures in man-made structures in such ground locations comprising the steps of:

- (a) providing an image sensor spaced remotely from the ground and which sequentially captures a number of images of various ground locations to provide digital images of such ground locations;
- (b) processing captured digital images to determine the presence of a potential material failure in a man-made structure in accordance with predetermined coordinate positions which locate the man-made structures in one or more of the captured digital images;
- (c) identifying reference points in the ground locations corresponding to the same reference points in the graphic representations of the ground location; and
- (d) superimposing the graphic representation with the reference points onto at least one of the captured digital images.

2. The method of claim 1 further including scaling the digital images to match or register with the graphic representation of ground location.

3. The method of claim 1 further including encoding with color or other symbol predetermined areas of interest.

4. The method of claim 1 further including displaying the layered information as a whole or in superimposable layers in either soft display or printed hardcopy.

5. The method of claim 1 further including supplying to a customer combined sets of graphic representations including that an indication that there is potential material failure detected in a predetermined coordinate position.

6. The method of claim 1 further including:  
(e) sending captured processed digital images with detected potential material failures to a customer.

7. The method of claim 6 wherein the digital image processing includes comparing previously captured digital images with newly captured digital images to determine variations in the captured digital images at the predetermined coordinates which indicate a potential material failure in a man-made structure.

8. The method according to claim 1 further including providing an image capture device which is located in a fixed structure position above the ground location or in a moving structure such as an aircraft or satellite.

9. The method of claim 1 further including storing in memory a representation of different material failures to be detected and comparing the captured digital image with the material failures to determine the presence of a material failure, type of material failures and location of the material failures.

10. A method of identifying material failures in man-made structures comprising the steps of:

(a) providing an image of a ground location and identifying material failures or potential material failures in a man-made structure at such ground location; and

(b) superimposing a graphic representation over such ground location image to aid in the identification of the position of the material failure in the man-made structure.